On the Role of Lexical Items in the Second-Language Development of Mood Use in Spanish

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Second-language (L2) variation research, which seeks to describe and explain how interlanguage varies according to linguistic and social factors and how this variation evolves as acquisition progresses, spans various languages and grammatical structures (e.g., Bayley & Preston, 1996; Geeslin, 2011; Mougeon, Nadasdi, & Rehner, 2010; Regan, Howard, & Lemée, 2009; Tarone, 1988). Knowledge gained from existing variationist research has demonstrated that a range of linguistic and extra-linguistic factors simultaneously influence L2 use and development (cf. Tarone, 2007). However, with regard to linguistic features that condition the L2 acquisition of variable morphosyntactic phenomena, studies have largely focused on phonological/phonetic, morphological, semantic, syntactic, and discourse/pragmatic features instead of vocabulary (for exceptions see Geeslin, forthcoming; Gudmestad & Edmonds, 2012). Since all modules of a linguistic system function together in communication and because vocabulary is an essential component to language (Gass, 2013), the hypothesis that vocabulary items are also influential in L2 variation is certainly plausible. Thus, the present study aims to contribute to the understanding of the role that vocabulary plays in L2 variation and acquisition by integrating the study of vocabulary into the investigation of a variable morphosyntactic structure that has already been examined in second language acquisition (SLA): mood distinction (the subjunctive-indicative contrast) in Spanish.

Research on mood distinction in Spanish has evidenced variable use\(^1\) among native speakers (NSs) (Silva-Corvalán, 1994) and has indicated that the same linguistic features that predict NS variation characterize developmental stages for L2 learners (Gudmestad, 2012). Although research on NSs and L2 learners has examined a range of linguistic factors that influence mood use (e.g., time reference of the discourse context), L2 studies have yet to explore the role that vocabulary plays in the acquisition and use of this grammatical structure. This issue is critical because sociolinguistic investigations have demonstrated that analyzing individual lexical items separately yields important insights into variable mood use among NSs (e.g., Blake, 1983; Garcia, 2011), and L2 variationist research has shown that NS patterns of language use and change are connected to L2 acquisition (cf. Geeslin, 2011). Therefore, it seems reasonable to hypothesize that individual lexical items are important for mood use in L2 Spanish. In response to previous sociolinguistic and L2 research, the current study investigates whether verbal moods in L2 Spanish develop at different rates across lexical items and how this use corresponds to variable use among NSs. It also aims to investigate whether NSs’ frequency of subjunctive use with a lexical item and whether frequency of occurrence of the lexical item in the target language are related to the L2 development of subjunctive use.

1. Background

1.1. Vocabulary and grammar

Research on vocabulary learning includes issues such as formulaic language, breadth and depth of lexical knowledge, production and recognition, first-language influence, and the roles of input and

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\(^1\) ‘Variable use’ means that speakers do not show categorical use of a verbal mood (i.e., obligatory use of the subjunctive or indicative) in certain linguistic contexts.

output in acquisition (cf. Milton, 2009; Nation, 2001; Nation & Webb, 2011; Schmitt, 2010). Of particular relevance to the current study, however, is the notion that vocabulary and grammar are not separate components and are interwoven in language development. The term lexicogrammar is sometimes used to represent this view, which finds support in SLA and other subfields of linguistics (e.g., Biber, Conrad, Reppen, 1998; Biber, Johansson, Leech, Conrad, Finegan, 1999; Gass, 2013; Halliday, 1961; Liu & Jiang, 2009; Sinclair, 1991; Tomasello, 2003). Such approaches that allow for grammar and vocabulary to be examined simultaneously leave open the possibility that lexical items play a role in the L2 development of morphosyntax. One approach to SLA that has begun to examine the connection between vocabulary and grammar is variationism. Specifically, it has been suggested that vocabulary may influence L2 development of variable morphosyntactic structures and that this issue is worthy of empirical investigation (Zyzik & Gass, 2008).

To my knowledge, two variationist studies have pursued this line of inquiry and offered evidence to support the claim. Geeslin (forthcoming) compared the variation in the use of copular verbs with vocabulary use between advanced non-native speakers and NSs of Spanish. In her analysis of data from sociolinguistic interviews, she found that the NSs allowed a greater degree of variation with individual lexical items (i.e., adjectives) than advanced non-native speakers. Gudmestad and Edmonds (2012) incorporated the role of lexical items into the study of the L2 development of mood distinction in French. In this investigation, L2 learners of French, corresponding to three proficiency levels, and a group of NSs of French completed two written contextualized tasks. The results of the analysis of lexical items indicated that the NSs exhibited variable mood use with 20 of the 30 lexical triggers under investigation and that the L2 groups showed variation with more triggers than the NSs. Levels 1 and 2 used both moods with each of the 30 lexical triggers, and Level 3 exhibited variable use with all but two of these lexical items. These findings suggest that as learners become more proficient in French, they begin to show categorical mood use with some lexical triggers, which is necessary for targetlike use, since NSs also use verbal moods categorically with some triggers (i.e., ten of the 30 lexical items in this investigation). Thus, knowledge gained from existing variationist research suggests that the study of variation at the vocabulary-morphosyntax interface is important for SLA.

1.2. Mood distinction

Mood distinction in Spanish predominately occurs in dependent clauses, although it can occur in independent clauses. A traditional explanation for the use of verbal moods is that preverbal lexical items determine which mood is used in a given content (Butt & Benjamin, 2011). Generally, the indicative appears after lexical items that mark meanings such as assertion, habitual actions, and definiteness, and the subjunctive occurs after lexical items that convey functions such as uncertainty, volition, and indefiniteness. Examples 1 and 2 illustrate the use of each mood.

(1) Sé que va a llover. ‘I know that it is going (INDIC) to rain.’
(2) Ana espera que no llueva. ‘Ana hopes that it does not rain (SUBJC).’

The previous research on mood distinction among NSs and L2 learners of Spanish that is most directly related to the present investigation will be discussed briefly here (see Bosque, 1990; Collentine, 2010; Haverkate, 2002; Pérez-Leroux, 1998; Terrell & Hooper, 1974; etc. for other scholarship on this grammatical structure in Spanish). Research on NSs of Spanish has laid a foundation for the current study’s focus on L2 acquisition. The subjunctive, compared to the indicative, is used infrequently in Spanish (Biber, Davies, Jones, & Tracy-Ventura, 2006). In addition

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2 For a variationist study that examines lexical variation see Nadasdi, Mougeon, and Rehner (2008). In this investigation, they analyzed various words meaning ‘car’ among L2 learners of French who completed a semi-directed interview. They found that learners’ use of the variants was not conditioned by the preceding element (e.g., preposition, determiner) and that, if the interviewer used a variant of ‘car’, the same variant always appeared in the learner’s speech (i.e., priming).

3 Howard (2008) also investigated the subjunctive in L2 French. Three groups of learners completed a sociolinguistic interview. Regarding subjunctive forms that can be distinguished from indicative forms, their use of the subjunctive was limited to two lexical triggers. Each group used the subjunctive with falloir que ‘to be necessary that’ and the most advanced group produced the subjunctive with vouloir que ‘to want that’.
to the subjunctive’s low frequency, mood use is variable and has been undergoing a change toward an increase in the use of the indicative for centuries (e.g., de la Puente-Schubeck, 1992; Gutiérrez, 1994; Harris, 1974; Lynch, 2000; Obaid, 1967; Silva-Corvalán, 1994; Studerus, 1995; Torres, 1989; see Houle & Martínez Gómez, 2009, for an exception). Sociolinguistic research has demonstrated that a range of factors, such as form regularity, semantic category, time reference, and task influence variation in the use of verbal moods (e.g., de la Puente-Schubeck, 1992; Gudmestad, 2010). Of these, the most widely investigated feature is semantic category (e.g., Lynch, 2000; Torres, 1989). This factor classifies sentence-level, preverbal triggers (i.e., independent clauses and adverbs/interjections) into categories that are unified by similar semantic content. For example, no creer que ‘to not believe that’ and tal vez ‘maybe/perhaps’ are lexical triggers (i.e., lexical items) that correspond to the semantic category that conveys the meaning of uncertainty/doubt. Sociolinguistic investigations on mood use in Spanish have demonstrated that semantic category aids in explaining variability (e.g., Silva-Corvalán 1994), but it also suggests that examining individual triggers separately, instead of many lexical items together under one semantic category, results in findings about variable mood use that would have otherwise not been apparent (e.g., Blake, 1983, 1985; DeMello, 1995; Finanger, 2011; García, 2011; Gili Gaya, 1972; Gudmestad, 2011; Renaldi, 1977; Woehr, 1972). For example, regarding first-language (L1) acquisition, Gili Gaya (1972) and Blake (1983, 1985) have suggested that in the early stages of acquisition, subjunctive development progresses at different rates with individual lexical items (i.e., a lexical strategy).

Turning to SLA research, mood distinction is acquired late in L2 Spanish (Geeslin & Gudmestad, 2008; Stokes, Krashen & Kartchner, 1998). Collentine (1995) argued that, since the subjunctive tends to occur in subordinate clauses, learners need to acquire the ability to produce complex sentences before they can use the subjunctive in targetlike ways. The subjunctive mood in interlanguage has been shown to be connected to irregular verbs and the semantic content of the preverbal trigger (e.g., Collentine, 1997; Geeslin & Gudmestad, 2008; Lubbers Quesada, 1998). Variationist research has demonstrated that the same factors that condition NSs’ mood use (e.g., semantic category, task) also characterize L2 acquisition and that, even though mood distinction takes a long time to acquire, adult learners can reach near nativelike production of verbal moods (Gudmestad, 2012). Other approaches have also examined mood distinction in L2 Spanish. For example, Universal Grammar scholarship has focused on the syntax-discourse interface and has shown that learners can interpret the subjunctive in nativelike ways (e.g., Borgonovo, Bruhn de Garavito & Prévost, 2005, Iverson, Kempchinsky & Rothman, 2008). This concise overview of previous work on mood distinction in L2 Spanish highlights that, while linguists have investigated a range of issues that are relevant for the acquisition of the subjunctive, L2 research has yet to explore the role that vocabulary may play in this process. Therefore, in the present study, I seek to build on work on mood distinction in L2 Spanish and to expand the existing work on the vocabulary-morphosyntax interface that has been carried out within the variationist framework by analyzing cross-sectional data to make assessments about the relationship between verbal moods and lexical items in L2 development.

2. The Current Study

In order to begin to understand the relationship between individual lexical items and variable mood use in L2 Spanish, the current study was guided by the following research questions:

1. Do learners exhibit variable mood use with individual lexical items and how does this use compare to that of NSs?
2. Do learners show different developmental patterns between lexical items that exhibit high and lower subjunctive use among NSs?
3. Do learners show different developmental patterns between lexical items that exhibit high and low relative frequency in the target language?

4 Compared to Spanish, the L2 acquisition of the subjunctive has received less attention in other Romance languages (e.g., Howard, 2008; McManus, Tracy-Ventura, Mitchell, Richard & Romero de Mills, forthcoming). Relevant literature is discussed in section 1.1.
2.1. Participants

The L2 learners \((N = 130)\) represent five proficiency levels that were determined based on previous coursework experience. Level 1 consisted of learners from two intact classes of a third-semester, Spanish-language course \((N = 26)\). They were all NSs of English. The ranged in age from 18 to 22 \((M = 19.1)\); 20 were women and six were men. Level 2 \((N = 35)\) was comprised of participants from two intact classes of a fifth-semester, Hispanic-cultures course. They were NSs of English, except for one participant who was a NS of Russian who learned English as a child.\(^5\) They ranged in age from 18 to 21 \((M = 19.0)\); 29 were women and six were men. Learners in Levels 3 and 4 were enrolled in content courses beyond the fifth-semester of language study (two intact, third-year courses and two intact, fourth-year courses). For the most part, Level 3 and Level 4 correspond to third-year and fourth-year courses, respectively, but some adjustments were made based on previous coursework experience because students in this academic program have flexibility with the sequence of courses (see Gudmestad, 2012, for details). In Level 3 \((N = 26)\), one participant was a NS of English and German; the others were NSs of English. Their average age was 20.4 (range: 18-23). Fourteen were women and 12 were men. There were two participants in Level 4 \((N = 23)\) who were NSs of two languages (English and Dutch, English and Mandarin), while the remaining participants were NSs of English. They ranged in age from 20 to 24 \((M = 21.5)\). Seventeen were women and six were men. All learners in Levels 1 through 4 were undergraduate students. The Level 5 participants \((N = 20)\) were graduate students or had recently completed their graduate degree. Nineteen of the Level 5 participants were instructors of Spanish courses and one was a graduate. They were all NSs of English. Their average age was 30.2 (range: 22-47) and they were evenly divided between the sexes.

The NSs of Spanish \((N = 20)\) were graduate students living in the United States at the time of data collection. Seventeen had experience teaching undergraduate Spanish courses. They were evenly divided between the sexes and ranged in age from 25 to 42 \((M = 30.2)\). Their places of origin (Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, Mexico, Peru, Puerto Rico and Spain) reflect the varied exposure to the Spanish language that the learners in the present investigation had likely received, either during their educational experiences in the United States or abroad. Consequently, this diversity makes them a suitable comparison group for the learners. The results for this NS group that are presented in the current investigation were first reported in Gudmestad (2011).

The language proficiency test (see Data-elicitation Tasks section) served to verify the use of course level to distinguish among proficiency levels. An ANOVA and a Post Hoc Scheffé examined differences in mean scores on the proficiency test between groups (Table 1) and identified significant differences between groups with two exceptions. The statistical test did not reveal significant differences in mean scores between Levels 3 and 4 or among Level 4, Level 5, and the NSs. However, the average score for Level 3 was significantly different from the mean scores for Level 5 and the NSs, so these differences indirectly identified a difference between Levels 3 and 4. The averages for the two most advanced L2 groups and the NSs were close to the highest possible score, so the test’s inability to distinguish between certain participant groups is probably due to a ceiling effect for the test.\(^6\)

2.2. Data-elicitation Tasks

I designed three oral-production tasks to collect data on mood use in Spanish. All participants completed these three tasks in the same order, and their oral production was digitally recorded. An example of each instrument is available in the Appendix. Two research assistants and I transcribed the data.

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\(^{5}\) The four learners in the current study who spoke another language in addition to English as children were not excluded from the investigation because their language behavior on the tasks under investigation did not differ from the range of language behavior observed from other participants who belonged to the same proficiency group.

\(^{6}\) Even though there are limitations to this language proficiency test’s ability to distinguish between some participant groups, I report the results for this test here to be consistent with previous research in which this dataset is analyzed (e.g., Gudmestad, 2012).
Table 1

<table>
<thead>
<tr>
<th>Group</th>
<th>M</th>
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<th>Min. score</th>
<th>Max. score</th>
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<td>7.51</td>
<td>2.17</td>
<td>2</td>
<td>11</td>
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<td>Level 3</td>
<td>8.96</td>
<td>2.31</td>
<td>4</td>
<td>11</td>
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<td>Level 4</td>
<td>10.00</td>
<td>1.00</td>
<td>7</td>
<td>11</td>
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</tr>
<tr>
<td>NSs</td>
<td>10.80</td>
<td>0.41</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>

*Note.* The highest possible score is 11. F(5, 144) = 45.822, p<0.001. A Post Hoc Scheffé identified four distinct groups.

Task 1 was a monologic role play. With this task, the participants were presented with six scenarios, each of which was followed by a series of questions that were designed to elicit a variety of mood-choice contexts (see the Data Coding and Analysis section for a definition of mood-choice context). With every scenario the participants imagined themselves to be a different person and answered questions while pretending to speak to an imaginary person. This instrument gave participants an opportunity for extended language production. The scenarios were presented on PowerPoint slides using a computer, and each one advanced automatically after the allotted time (three minutes, 45 seconds).

The format for the other two oral-production tasks was similar. Task 2 was a contextualized-clause-elicitation task and Task 3 was a contextualized-verb-elicitation task. For each instrument, there was a series of contextualized items (N = 30 segments per task) that built on a single story. The items represented various types of mood-choice contexts. All segments in Task 2 were followed by the beginning part of a Spanish sentence that was integrated into the story as dialogue. The participants were asked to read each segment silently and then to read the beginning part of the Spanish sentence aloud and complete the sentence with a phrase that made sense in the context of the story. Every segment of Task 3 was followed by a Spanish sentence that was integrated into the story as dialogue. In the mood-choice context of the sentence, I provided an infinitive in parentheses. Participants were instructed to read each segment to themselves and then read the sentence aloud while providing the verb form they felt was appropriate in the context. The items for these two instruments were presented on a computer using PowerPoint and each slide advanced automatically (40 seconds per item on Task 2, 26 seconds per item on Task 3).

All participants also completed a background questionnaire and a language proficiency test. The former activity enabled me to obtain demographic information about the participants, as well as details about their language experiences. The language proficiency test consisted of an 11-item, multiple-choice activity that addressed a range of grammatical structures in Spanish (see section 2.1. for the results). Woolsey (2009) demonstrated that this test was a dependable measure for distinguishing L2 proficiency levels. The participants were given three minutes to complete the test.

2.3. Data Coding and Analysis

A token was defined by a verb used in a mood-choice context. A ‘mood-choice context’ was operationalized in the present investigation as follows: a verb used in a subordinate clause produced after a matrix clause that expresses a meaning of one of five semantic categories (volition, comment, uncertainty, temporality, assertion) or a verb produced after a lexical expression that conveys one of five semantic categories. The dependent variable was the verbal mood used in a mood-choice context. The variants were the subjunctive or non-subjunctive. I use the term ‘non-subjunctive’ instead of the

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7 I determined the allotted completion times for each oral-production task after conducting a pilot study.
8 Since the analysis in the current study examines a subset of the data, see Gudmestad (2012) for a detailed discussion of each of these semantic categories.
indicative’ because learners produced some non-finite verb forms in contexts where a finite verb would be expected. The two independent linguistic variables were the frequency with which NSs used the subjunctive with individual lexical items (i.e., lexical triggers) and relative frequency of the lexical item, and they serve as indirect measures of the input learners may receive. The NSs’ frequency of subjunctive use with individual lexical triggers was determined by a previous study (Gudmestad, 2011) in which I analyzed NSs’ mood use according to different lexical items. These NSs completed the same tasks as the learners in the current investigation, thus I controlled for variation in language behavior that occurs across tasks (cf. Geeslin, 2010). The two categories of this variable were high and lower. High subjunctive use means that the NSs used the subjunctive more than 95 percent of the time with a lexical trigger. The lower-subjunctive-use category consisted of lexical items with which the NSs used the subjunctive between 30 and 70 percent of the time. These decisions were not made a priori; instead, I selected the categories based on the language patterns of the NSs in my dataset. The relative frequency of the lexical items in Spanish was determined after conducting frequency counts using the 20th century section (20,540,030 words) of the *Corpus del español* (Davies, 2002-). The lexical items that exhibited high relative frequency occurred more than 1500 times in the corpus and the lexical triggers that showed lower relative frequency appeared fewer than 140 times in the corpus. Once again, these decisions were not made a priori; the analysis of the *Corpus del español* was limited to the frequency of occurrence of the lexical items that the NSs had used in Gudmestad (2011). The one independent extra-linguistic variable was participant group: the five proficiency levels of L2 learners and the group of NSs I reported on previously.

The data analysis consisted of four steps to determine which lexical items I would examine in the present study and three steps to enable me to answer the research questions – seven steps in all. I first conducted frequency counts to identify lexical items that occurred at least an average of once per participant for each participant group. Second, as previously mentioned, I identified lexical items that showed high and low subjunctive use for the NSs who completed the same tasks as the learners. Third, using the *Corpus del español* (Davies, 2002-), I identified lexical items that exhibited high and low relative frequency. Fourth, I selected two lexical items for each combination of the independent linguistic variables (eight lexical triggers in all): (a) high subjunctive frequency/high relative lexical frequency, (b) high subjunctive frequency/low relative lexical frequency, (c) lower subjunctive frequency/high relative lexical frequency, and (d) lower subjunctive frequency/low relative lexical frequency. After these initial steps, I began the quantitative analysis in order to respond to the research questions. For the fifth stage of the analysis, I conducted cross-tabulations to examine the rate of subjunctive use for the eight lexical items under investigation for each participant group. Sixth, for every participant group, I calculated the range of subjunctive use across lexical items, by subtracting the lexical item that exhibited the lowest subjunctive use from the trigger that showed the highest subjunctive use. Seventh, I examined the changes in frequency of subjunctive use for each lexical item across L2 proficiency levels and compared these frequencies with that of the NSs, which enabled me to make observations about L2 development and target-like use, respectively. During this final phase of the analysis, I distinguished between lexical items that exhibited high and lower subjunctive use among the NSs and between high and low relative lexical frequency in the *Corpus del español*.

3. Results

The presentation of the results begins with a classification of the eight lexical items under investigation in terms of NS subjunctive frequency (Gudmestad, 2011) and relative lexical frequency in Spanish (Davies, 2002-). The two lexical triggers that exhibited high subjunctive use and high relative lexical frequency were *querer que* ‘to want that’ (100% subjunctive and 1618 tokens) and *esperar que* ‘to hope/expect that’ (95.9% subjunctive and 1559 tokens). The lexical items that showed high subjunctive use and low relative lexical frequency were *preferir que* ‘to prefer that’ (100% subjunctive and 138 tokens) and *interesar que* ‘to interest that’ (100% subjunctive and 65 tokens). The lexical items that exhibited lower subjunctive use and high relative lexical frequency were *quizá(s)* ‘maybe/perhaps’ (31.5% subjunctive and 4287 tokens) and *tal vez* ‘maybe/perhaps’ (30.1% subjunctive and 2687 tokens). The lexical triggers that showed lower subjunctive use and low relative lexical frequency were *no pensar que* ‘to not think that’ (69% subjunctive and 59 tokens) and *tan pronto como* ‘as soon as’ (42.1% subjunctive/79 tokens).
Next, I conducted cross-tabulations to determine the frequency of subjunctive use with each trigger for every L2 group; the data for the NSs were previously reported in Gudmestad (2011). Close examination of the findings in Table 2 reveals two ways of describing variability in mood use according to different lexical items. First, most lexical items exhibited variable use (i.e., use of both subjunctive and non-subjunctive forms). Categorical subjunctive use was only seen with NSs and three triggers (querer que, preferir que, and interesar que); no L2 group used the subjunctive 100 percent of the time with any lexical item. The NSs did not use the non-subjunctive categorically with any lexical item, but Level 1 produced non-subjunctive forms categorically with tan pronto como. No other participant group exhibited categorical non-subjunctive use with any lexical item. These results indicate that each L2 group was variable with fewer lexical items than the NS group. Additionally, the range of subjunctive use for each participant group (i.e., the value that results from subtracting the lexical item with the lowest subjunctive use from the lexical item with the highest subjunctive use) offered another indication of the extent of mood-use variability present with each participant group and how this variability changed as learners became more proficient in the target language. Comparing the range for each participant group indicated that as L2 proficiency level increased, learners gradually increased the range of frequency with which they used the subjunctive among these eight lexical items (i.e., the range for Level 1 was 11.1% and the range for Level 5 was 53.7%). This increase in the range of subjunctive use was not completely linear; a temporary decrease was observed between Level 1 and Level 2, whose range was 8.2 percent. The increase in the range of subjunctive use appears to signify a move toward more target-like use, as the NSs’ range was 69.9 percent, but no L2 group reached this range of use. In other words, in terms of range of use, the NSs were more variable in their use of the subjunctive across these eight lexical items than any L2 group. Moreover, the fact that every participant group produced the subjunctive at a different rate with each of the lexical triggers under investigation suggests that the rate of acquisition of the subjunctive is not identical across lexical items. This observation appears to indicate that individual lexical items are important in the L2 development and use of verbal moods in Spanish. Next, I explore the frequency of NS subjunctive use and relative frequency of the lexical triggers in Spanish in relation to L2 use in order to begin to understand the specific role that lexical items may have on the variation of this morphosyntactic structure.

Beginning with the lexical triggers that exhibit high subjunctive use among the NSs, Table 3 distinguishes between the high-subjunctive lexical items that show high and low relative use. For the lexical items with which NSs produced the subjunctive categorically or almost categorically, regardless of lexical item’s relative frequency, learners gradually increased their subjunctive use with these lexical items but did not reach targetlike frequency of use. Furthermore, with each of the four high-subjunctive lexical triggers, Level 5, the most proficient L2 group, most closely approached the NS frequency of subjunctive use. No differences in terms of the path of acquisition or targetlike use were observed between the lexical items that exhibit high and low relative frequency.

The next part of the analysis focuses on the lexical items that showed lower subjunctive use among the NSs. Table 4 distinguishes between the lower-subjunctive lexical items that exhibited high and low relative frequency. For the lexical items with which NSs produced the subjunctive at lower rates of frequency, regardless of relative lexical frequency, the acquisitional trajectory appears to be one in which learners reached a targetlike frequency of use, and subsequently, as they became more proficient in Spanish, learners surpassed the NS frequency of use. Quizás(s), tal vez, and tan pronto como seem to illustrate this developmental pattern most clearly. With quizás(s) Level 3 used the subjunctive within two percent of the NS frequency but Level 5’s rate of subjunctive production was nine percent greater than that of the NSs. With tal vez Level 4 produced the subjunctive within one percent of the NSs’ rate of use, while Level 5 used the form in 17.7 percent more contexts than the NSs. With tan pronto como the difference in frequency of subjunctive use between the NSs and Level

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9 In this part of the analysis, I focus on the range of subjunctive use across lexical items and how this range of use changes as proficiency level increases, instead of how the overall frequency of subjunctive use changes across participant groups.
10 With the exception of interesar que, there was a temporary decrease in subjunctive use between Levels 3 and 4 with the lexical items that exhibited high subjunctive use among NSs.
11 This finding, which suggests that the developmental path is not entirely linear, is consistent with other research on L2 variation (e.g., Gudmestad, 2012; Gudmestad & Edmonds, 2013; Gudmestad & Geeslin, 2013).
Table 2

Frequency of Subjunctive Use for Individual Lexical Item

<table>
<thead>
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<th>Lexical item</th>
<th>Level 1</th>
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<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
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<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
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<td>10</td>
<td>14.5</td>
<td>12</td>
<td>23.1</td>
</tr>
<tr>
<td>Tan pronto como</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>12.7</td>
<td>9</td>
<td>18.4</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td><strong>11.1</strong></td>
<td><strong>8.2</strong></td>
<td><strong>34.6</strong></td>
<td><strong>35.7</strong></td>
<td><strong>53.7</strong></td>
<td><strong>69.9</strong></td>
</tr>
</tbody>
</table>
4 was 20.1 percent, whereas the difference in rate of subjunctive use between the NSs and Level 5 was 28.6 percent. In the case of no pensar que, Level 5 was the L2 group whose frequency of subjunctive use was closest to that of the NSs but this group’s subjunctive use exceeded the NSs’ rate of use by 15.6 percent. Thus, with all four lexical triggers, Level 5 overshot the NS target.

Table 3
Percentage of Subjunctive Use for Triggers Exhibiting High Subjunctive Use among NSs

<table>
<thead>
<tr>
<th>Relative lexical frequency</th>
<th>Lexical item</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>NSs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Querer que</td>
<td>1.7</td>
<td>10.3</td>
<td>32.3</td>
<td>30.2</td>
<td>94.9</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Esperar que</td>
<td>3.9</td>
<td>11.0</td>
<td>30.8</td>
<td>24.1</td>
<td>89.0</td>
<td>95.9</td>
</tr>
<tr>
<td>Low</td>
<td>Preferir que</td>
<td>4.9</td>
<td>13.9</td>
<td>53.8</td>
<td>50.0</td>
<td>90.0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Interesar que</td>
<td>4.5</td>
<td>15.9</td>
<td>42.3</td>
<td>46.9</td>
<td>84.0</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4
Percentage of Subjunctive Use for Triggers Exhibiting Lower Subjunctive Use among NSs

<table>
<thead>
<tr>
<th>Relative lexical frequency</th>
<th>Lexical item</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>NSs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Quizá(s)</td>
<td>4.7</td>
<td>12.3</td>
<td>29.6</td>
<td>14.3</td>
<td>40.5</td>
<td>31.5</td>
</tr>
<tr>
<td></td>
<td>Tal vez</td>
<td>11.1</td>
<td>7.7</td>
<td>19.2</td>
<td>29.2</td>
<td>47.8</td>
<td>30.1</td>
</tr>
<tr>
<td>Low</td>
<td>No pensar que</td>
<td>6.4</td>
<td>14.5</td>
<td>23.1</td>
<td>31.1</td>
<td>84.6</td>
<td>69.0</td>
</tr>
<tr>
<td></td>
<td>Tan pronto como</td>
<td>0</td>
<td>12.7</td>
<td>18.4</td>
<td>22.0</td>
<td>70.7</td>
<td>42.1</td>
</tr>
</tbody>
</table>

Finally, in order to compare the lexical triggers that exhibited high relative frequency with those that exhibited low relative frequency, it is necessary to examine the results in Tables 3 and 4 together. Two specific observations emerge from this comparison. The first observation concerns Level 5’s subjunctive use. While they used the subjunctive between 70.7 percent of the time (tan pronto como) and 90.0 percent of the time (preferir que) with lexical items that exhibited low relative frequency, a difference of 19.3 percent, their subjunctive use ranged from 40.5 percent (quierer que) to 94.9 percent (querer que) with lexical items that showed high relative frequency, a difference of 54.4 percent. In other words, among advanced-level learners, there appears to be greater variability in the range of subjunctive use with lexical triggers that were high in relative frequency than those that were low in relative frequency. Second, learners in the current investigation approached the NSs’ frequency of subjunctive use most closely with the lexical items that showed high relative frequency and lower subjunctive use among NSs (Level 3 for quizá(s) and Level 4 for tal vez). This finding suggests that differences in L2 development of the subjunctive between lexical items that showed high and low relative frequency may be apparent when the NSs’ frequency of subjunctive use is also taken into account.

4. Discussion

In this section I offer answers to the research questions and then connect the present investigation’s findings to previous research. The first research question addressed whether learners exhibited variable mood use with lexical items and how their use compared to NS use. I assessed variation in two ways and found evidence of variability with each L2 group. For one, the results indicated that learners were variable in their mood use with each lexical item. The only exception to this observation was Level 1’s categorical non-subjunctive use with tan pronto como. In contrast, the NSs showed variable use in five of the eight triggers. Thus, when variability was evaluated by looking at mood use with individual lexical items, the NSs were variable with fewer lexical triggers than each...
L2 group. Examination of the range of subjunctive use across individual lexical triggers also revealed that learners’ subjunctive use across lexical items was variable; no L2 group used the subjunctive at the same rate with all lexical triggers. In contrast to the first measure of variability, comparisons of range of subjunctive use revealed that each L2 group was less variable than the NSs. Specifically, the L2 groups’ range of subjunctive use across lexical items increased as proficiency level increased but they did not reach the NSs’ range of use.

The second research question sought to examine whether learners exhibited different developmental patterns between lexical items that showed high and lower subjunctive use. A difference was observed in terms of attainment of targetlike use. Level 5 participants did not reach targetlike subjunctive frequency with lexical items that exhibited high subjunctive use. However, they used the subjunctive at a higher rate than NSs with the lexical items that showed lower subjunctive use. Moreover, with the lexical items that showed lower subjunctive use, except for no pensar que, a lower-level L2 group (Level 3 or 4) used the subjunctive at a more similar rate to the NSs than Level 5. Thus, the data seem to indicate that as learners become more proficient they continue to increase their use of the subjunctive with each lexical item, even though this increase in use is only necessary for targetlike use with the lexical triggers exhibiting high subjunctive use among the NSs (three of which elicited categorical use from the NSs).

The third research question addressed whether learners exhibited different developmental patterns between lexical items that showed high and low relative frequency. At least with regard to the eight lexical triggers under investigation, the evidence seems to suggest that learners in the most advanced proficiency level are more variable in their use of the subjunctive with lexical items that exhibit high relative frequency than those that show low relative frequency. The data also show that learners (Level 3 for quizá(s) and Level 4 for tal vez) were most targetlike in their frequency of subjunctive use with lexical triggers that occurred relatively frequently in the Corpus del español and showed lower subjunctive use among NSs.

Considering the results from the current study as a whole, a number of important observations that have clear connections to SLA have emerged. First, the present investigation has built on Geeslin (forthcoming) by examining another morphosyntactic structure in Spanish and by expanding the analysis from a comparison of advanced non-native speakers and NSs to a study of L2 development using cross-sectional data. Consequently, it offers preliminary evidence from mood distinction in Spanish to support the claim that individual lexical items play a role in the L2 development of variable morphosyntactic structures (cf. Zyzik & Gass, 2008). Second, learners showed lexical-item variation with mood distinction at early and advanced stages of development. While this finding is similar to the results found for learners of French (Gudmestad & Edmonds, 2012), it differs from research on copula contrast in Spanish that indicated that advanced non-native speakers exhibited limited variation of copular verbs with adjectives (cf. Geeslin, forthcoming). This latter observation is interesting in light of the general finding that copula contrast appears to be acquired before mood distinction (Geeslin & Gudmestad, 2008). It seems that, although learners begin to acquire the ability to vary their use of verbal moods with individual lexical items at early developmental stages, it ultimately takes a longer time to acquire targetlike use of mood distinction than copula contrast, despite the fact that variation of copular verbs with lexical items develops quite late in L2 acquisition. In other words, the overall rate of acquisition of a morphosyntactic structure and the rate of acquisition of variation with individual lexical items of that same structure may be different when various morphosyntactic structures are compared. Third, Level 5 and the NSs showed noticeable differences in the rate of subjunctive use for each of the eight lexical items under investigation. However, when the entire dataset was analyzed, their overall rates of use of verbal moods were not statistically different (Gudmestad, 2012). The comparison of these two findings suggests that the investigation of individual lexical items reveals additional details about L2 acquisition, such that researchers may be able to track the point in the acquisitional process at which targetlike frequency of use is attained with each trigger. Fourth, similar to L1 acquisition (e.g., Blake, 1983, 1985; Gili Gaya, 1972), L2 learners appear to use a lexical strategy as they acquire the ability to use the subjunctive mood. This strategy seems to be one in which the strength of the association between the lexical item and the subjunctive in the input (measured indirectly) and, to a lesser degree, the frequency with which the lexical trigger occurs in the target language play a role in L2 acquisition. It is important to note, however, that this strategy does not appear to function in isolation. Previous research has also indicated that learners develop other linguistic strategies (e.g., discourse, syntactic) (e.g., Collentine, 1995; Gudmestad, 2012).
5. Conclusion and Future Directions

The current study demonstrated that L2 learners of Spanish vary their use of verbal moods with individual lexical items from beginning to advanced proficiency levels and that they did not reach targetlike frequency of subjunctive use with any of the eight lexical triggers under investigation. It also suggested that that NSs’ frequency of subjunctive use and the relative frequency of occurrence of the lexical items in the target language help to characterize the L2 development of variable mood use in Spanish. While the present investigation served to explore the relationship between lexical items and a variable morphosyntactic structure in L2 acquisition, it has also set the stage for future scholarship. The present analysis was limited to eight lexical items, so clearly expansion of the lexical items investigated is necessary in order to confirm whether the results found for frequency of subjunctive frequency and relative lexical frequency generalize to other vocabulary items. Moreover, the range of frequency of subjunctive use with the lexical triggers that exhibited lower subjunctive use ranged from 30.1 percent with tal vez to 68 percent with no pensar que, so it may be worth examining whether the degree of variability of subjunctive use in the input impacts L2 acquisition. An understanding of how learners’ lexical strategies interplay with other linguistic (e.g., discourse) strategies and how this interplay evolves during acquisition is also important. Assessing vocabulary knowledge (e.g., lexical density) and how it impacts the acquisition of morphosyntax may be another vital component to characterizing the vocabulary-morphosyntax interface. Lastly, in order for this area of research to make a strong contribution to theory building in SLA, investigations on additional morphosyntactic structures (e.g., subject expression, future-time reference) and other languages are essential.

Appendix: Examples of Oral-elicitation Tasks

An English translation of an item from each data-elicitation task accompanies the Spanish examples. No Spanish version of the story segments of Tasks 2 and 3 is given because the stories were presented in English to eliminate other linguistic and comprehensibility factors that may have impacted learner performance.

Task 1, item 2

Eres un/a hijo/a único/a que tiene 10 años. Andas en el parque con tus papás y ves a una familia con 10 hijos. Empiezas a imaginar tu vida con muchos hermanos y se la describes a tus papás.

• ¿Serías el/la hijo/a menor, mayor o en el medio?
• ¿Qué te gustaría de esta situación familiar?
• ¿Qué te molestaria de esta situación familiar?
• ¿Qué querrías de tus papás?
• ¿Qué esperarían tus papás de ti?
• ¿Qué dudas tendrías respecto a esta situación?
• ¿De qué no dudarías?
• ¿Es importante hacer o no hacer ciertas cosas? ¿Por qué?
• ¿Cómo afectarían ciertas circunstancias específicas tu estado emocional (tus emociones)? Describe estas circunstancias y tus emociones.
• Describe el ambiente en la casa.
• ¿Cómo cambiaría tu vida?
• ¿Habría algo que no fuera diferente?

‘You are a 10-year old only child. You’re walking in the park with your parents and you see a family with 10 children. You start to imagine what your current life would be like with many siblings and you describe it to your parents.

• Would you be the youngest, oldest, or middle child?
• What would you like about this family situation?
What would bother you about this family situation?  
What would you want from your parents?  
What would your parents expect from you?  
What doubts would you have about this situation?  
What wouldn’t you doubt?  
Is it important to do or not do certain things? Why?  
How would certain specific circumstances affect your emotion state (emotions)? Describe these circumstances and your emotions.  
Describe the environment in the house.  
How would your life change?  
Would there be something that wouldn’t be different?

Task 2, item 1
Clara, Pedro, and Tomás have just returned from semester break and are having dinner at a restaurant. They are catching up after being away from school for three weeks. Tomás had a great vacation. He and his family spent a week in Colorado and went skiing and hiking in the mountains. Talking about his trip, Tomás says:

“Me alegré de que _____________________________________.”

“I was happy that ___________________________________.”

Task 3, item 27
However, if they had gone to Italy, Javier could have had an opportunity see his grandparents. They have been living in Rome for many years. Ana says:

“Habría sido posible que se ____________ (poner) en contacto con sus abuelos.”

“It would have been possible that ________ (to put) himself in contact with his grandparents.”

References


